DOCKET FILE COPY ORIGINAL

RECEIVED

JUN 13 1997

FCC MAIL ROOM

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.20554

In the Matter of:	)	
	)	
Advanced Television Systems	)	MM DOCKET NO. 87-268
and their Impact Upon the Existing	)	
Television Broadcast Service	)	

To: The Commission

PETITION FOR PARTIAL RECONSIDERATION

On behalf of Duhamel Broadcasting Enterprises ("DBE"), we hereby submit this Petition for Partial Reconsideration of the Commission's Sixth Report and Order ("Sixth R&O") in the captioned proceeding. DBE is the licensee of KOTA-TV, Channel 3, Rapid City, South Dakota; KDUH-TV, Channel 4, Scottsbluff, Nebraska; KSGW-TV. Channel 12, Sheridan, Wyoming and KHSD-TV, Channel 11, Lead, South Dakota.

In our comments filed in connection with the Commission's Notice of Proposed Rulemaking ("NPRM") in this proceeding, we asked the Commission to consider alternative digital TV ("DTV") allotments for KDUH-TV (Channel 4, Scottsbluff, Nebraska); KSGW-TV (Channel 12, Sheridan, Wyoming); and KHSD-TV (Channel 11, Lead, South Dakota). We are in an area where VHF channels are used to cover large areas in order to build a market place large enough to make small market television feasible. (DMA Market rank of 173 from the 4 VHF stations combined.) As we move into the DTV era, we need to preserve our market size and there are VHF channels available without interfering with other DTV channel allocations in our or other surrounding markets. To avoid unnecessary financial and technical hardships, we urge the Commission to make alternative DTV allotments. Justification for each request is

included in the attached Technical Exhibit. Specifically, we suggest the following alternative DTV allotments:

Station	NTSC Channel	DTV Allotment	DTV Proposal
KDUH-TV	4	19	7
KSGW-TV	12	21	13
KHSD-TV	11	27	12

Accordingly, we request the Commission to partially reconsider its Sixth R&O to make these alternative DTV allotments.

Respectfully submitted,

DUHAMEL BROADCASTING ENTERPRISES

By: _____

William F. Duhamel, President
Duhamel Broadcasting Enterprises
P. O. Box 1760
Rapid City, South Dakota 57709

Re: KSGW DTV Allotment

Assigning KSGW to a UHF DTV channel creates some problems that may prove to be insurmountable.

KSGW is located on a remote mountain top in the Bighorn National Forest in Wyoming.. The United States Forest Service ("USFS") has already stated, for the record, that it will not permit the erection of structures tall enough to require lighting (over 61m).

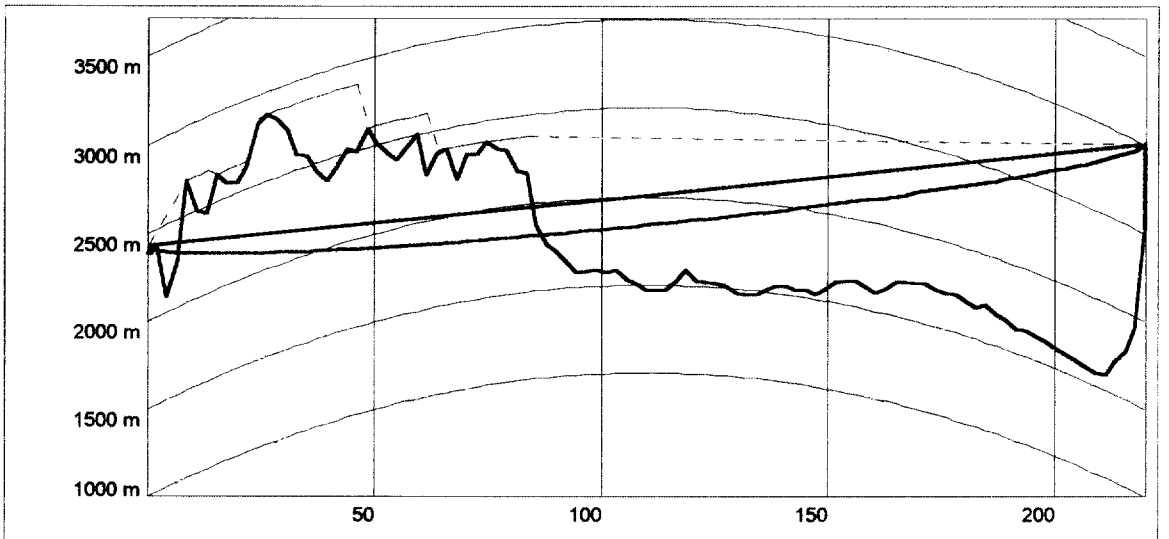
The DTV allotment assigns KSGW to UHF channel 21, with an ERP of 1,000 Kw. This simply is not possible at the present site or any site in the area of equivalent altitude because all are on USFS lands. The FAA won't allow a tower over 61m without lights and the USFS won't allow a tower with lights, and placing a signal that strong only 21m above ground will exceed ANSI limits (re: OST Bulletin 65) by such an amount that the station will need to cease operation whenever humans are in the vicinity. Since this is a favorite snowmobile trail and hunting area for local residents and tourists, the station operator will have no knowledge of when these humans are in the area, which would cause a dangerous situation for anyone in this area, as well as interfering with the TV viewing anytime a hiker was in the area..

We are requesting that DTV channel 13 be assigned to KSGW. The closest co-channel is a proposed NTSC channel 13 in Casper, Wyoming, at a distance of 219.9 Km, followed by a proposed DTV channel 13 in Miles City, Montana, at a distance of 222.0 Km. As the appropriate point to point study indicates, there is significant terrain shielding both directions approximately 5-95 Km from KSGW-TV to the proposed NTSC channel 13 in Casper, Wyoming and 105-120 Km for the proposed DTV channel 13 in Miles City, Montana from each transmitter. This proposed facility would be co-owned, co-located, and diplexed into the existing KSGW transmitting antenna. Not only is the geographical separation significantly greater than the FCC minimum requirement of 155 Km, but the

combined total ERP of the DTV 13 and the NTSC 12 would not exceed ANSI limits at ground level.

It is not practical to require KSGW to construct a facility that could not be kept within compliance with ANSI limits (OST Bulletin 65).

We would like to study the interference possibilities as the Commission recommends in its NPRM using OET Bulletin No. 69, when it is available for use.

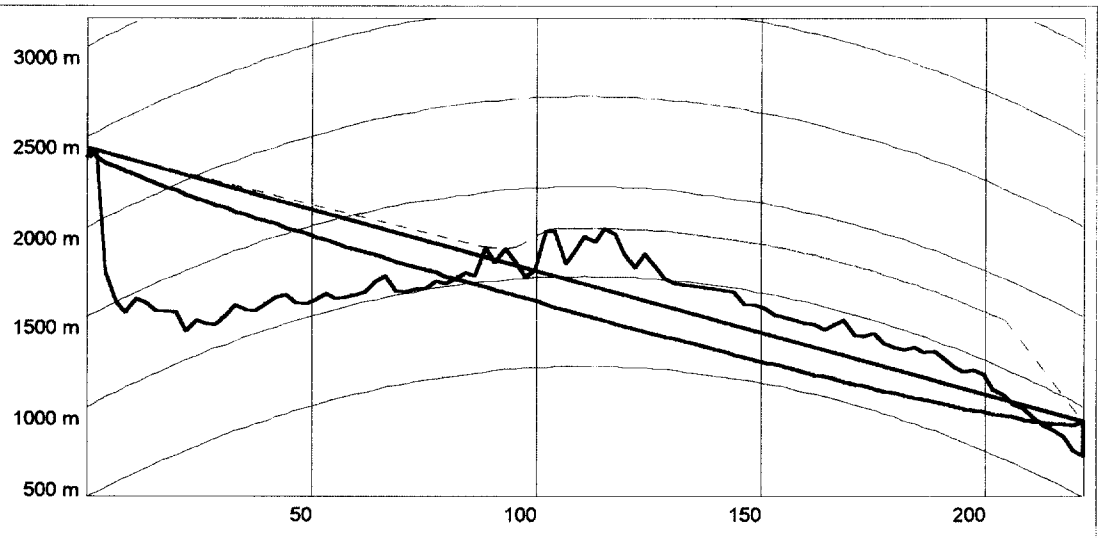


KSGW TV	Dist (Km): 219.9	NTSC APPL
Lat: 44-37-20 N	Bearing: 163.12	Lat: 42-43-42 N
Lon: 107-06-57 W	# pnts: 100	Lon: 106-19-26 W
Site AMSL (m): 2384.8	K: 1.333	Site AMSL (m): 2521
Tower AGL (m): 43.9	Fres. Clr: 0.600	Tower AGL (m): 481.2
	Freq (MHz): 202.25	

Free Space Loss = 125.4 dB

Plane Earth Loss = 165.1 dB

Excess Loss = 75.3 dB



KSGW TV	Dist (Km): 222.0	KYUS (DTV
Lat: 44-37-20 N	Bearing: 26.44	Lat: 46-24-38 N
Lon: 107-06-57 W	# pnts: 100	Lon: 105-51-03 W
Site AMSL (m): 2384.8	K: 1.333	Site AMSL (m): 723
Tower AGL (m): 43.9	Fres. Clr: 0.600	Tower AGL (m): 189.0
	Freq (MHz): 211.25	

Free Space Loss = 125.9 dB

Plane Earth Loss = 161.4 dB

Excess Loss = 31.4 dB

Re: KDUH DTV Transition

The proposed transition of KDUH-TV to a UHF DTV channel raises several serious problems.

In the July, 1993 tower analysis, performed by Structural Systems Technology, McLean, Va., it is stated that, "The results of the analyses clearly indicate that the towers present antenna and transmission line loading has reach its optimum." The addition of a UHF DTV antenna and waveguide would put us in a situation where, "Significant icing of the tower or its guy cables could result in severe overstressing of critical structural elements and place the tower in serious distress." Appendix A of the Federal Communications Commission Sixth Report and Order allocates KDUH to UHF channel 19 with an ERP of 1,000 Kw.

The 1,876' KDUH antenna support structure would not support such an installation. The DTV UHF channel allocation would require waveguide for this distance of 1876'. The tower cannot be sufficiently reinforced to remain erect with this weight and wind load. The use of light weight VHF Yagi antenna and the smaller transmission line required for VHF would reduce the loading to where it would be possible to reinforce the existing tower to accommodate the DTV installation.

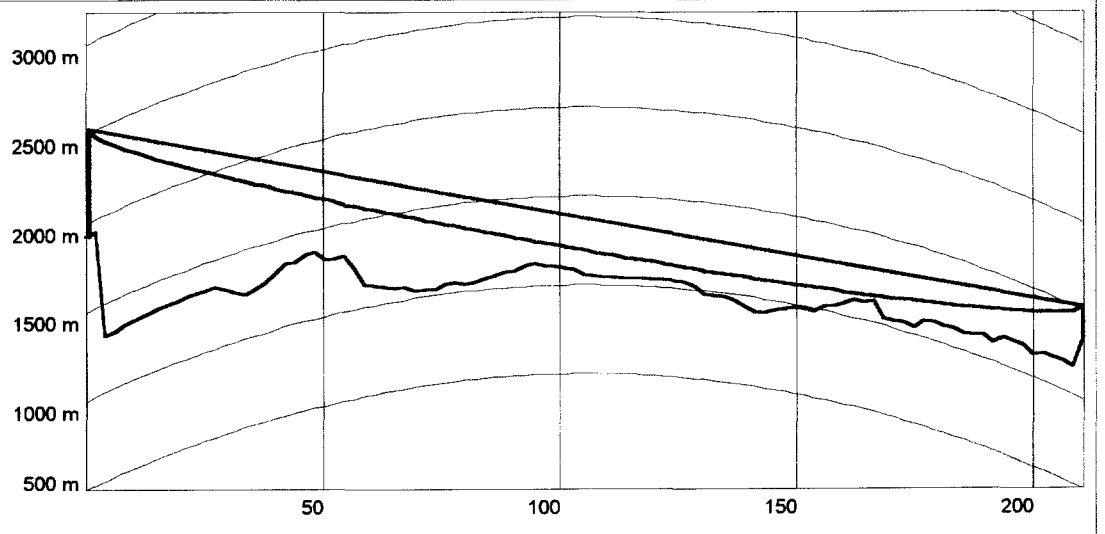
Our request is that DTV channel 7 be assigned to KDUH. The closest operating channel 7 is KEVN in Rapid City, South Dakota, at a distance of 210.6 Km. The only adjacent NTSC channel is KZSD, Martin, South Dakota, at a distance of 196.28 Km. These distances greatly exceed the FCC minimum geographical separation required between co-channel (155 Km) or adjacent channel (80 Km) operations.

Since our point to point study shows that there is line of site between KDUH at a proposed DTV channel 7 and KEVN NTSC channel 7, and KDUH at proposed DTV channel 7 and KZSD NTSC channel 7, when the OET Bulletin No. 69 is available, we believe we can design a directional system to minimize any interference from DTV channel 7.

Reassigning KDUH to DTV channel 7 would also make it economically and technically practical to reinforce the existing tower to accommodate the DTV installation.

It would not be cost effective to erect a second 2,000' tower in such a sparsely populated area of western Nebraska, where it would take decades to recover these costs.

There is also no other television station located near our transmitter site with whom we could enter into negotiations to jointly build such a facility.



KDUH TV

Lat: 42-10-21 N

Lon: 103-13-57 W

Site AMSL (m): 1925.1

Tower AGL (m): 597.7

Dist (Km): 210.6

Bearing: 359.59

pnts: 100

K: 1.333

Fres. Clr: 0.600

Freq (MHz): 175.25

KEVN TV

Lat: 44-04-06 N

Lon: 103-15-03 W

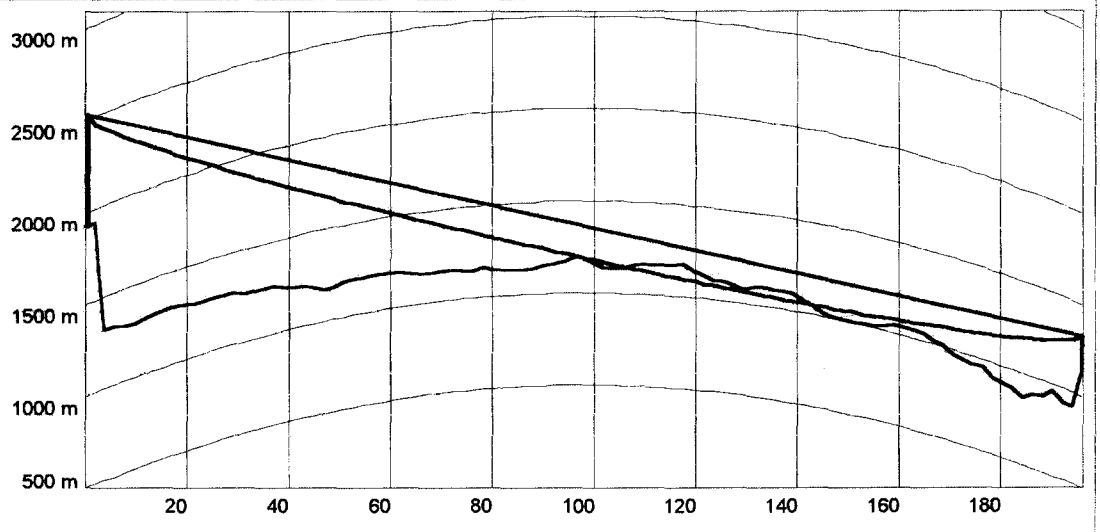
Site AMSL (m): 1330.1

Tower AGL (m): 184.0

Free Space Loss = 123.8 dB

Plane Earth Loss = 159.8 dB

Excess Loss = 0.0 dB



KDUH TV	Dist (Km): 196.28	KZSD TV
Lat: 42-10-21 N	Bearing: 44.39	Lat: 43-26-06 N
Lon: 103-13-57 W	# pnts: 100	Lon: 101-33-14 W
Site AMSL (m): 1925.1	K: 1.333	Site AMSL (m): 1132.9
Tower AGL (m): 597.7	Fres. Clr: 0.600	Tower AGL (m): 189.0
	Freq (MHz): 175.25	

Free Space Loss = 123.2 dB

Plane Earth Loss = 158.0 dB

Excess Loss = 0.0 dB

Re: KHSD DTV Assignment

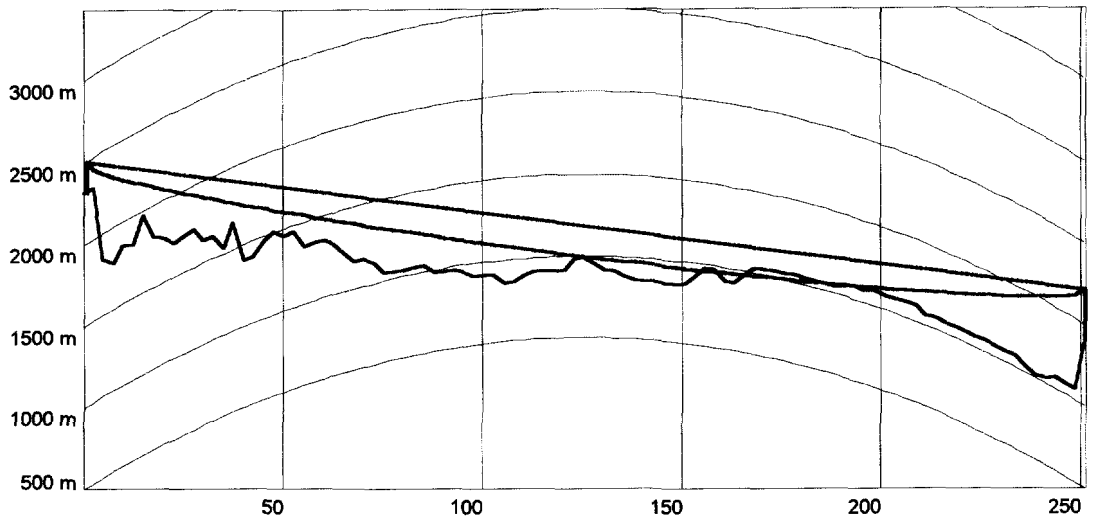
Assigning KHSD a UHF DTV channel will cause unreasonable disturbance to several licensed communications users.

KHSD has the ideal tower location on a remote mountain top, and has several tenants. While we realize that we could evict the tenants on the KHSD-TV tower in order to make available space for the DTV UHF antenna, we believe there is an alternative solution. If the Commission would assign a high band VHF channel to KHSD for DTV, we can diplex into the current NTSC antenna. In order to provide sufficient space for a UHF antenna on the KHSD tower, it would be necessary to evict these tenants. It is not realistic to place this burden on Cellular Telephone, KSLT Religious FM, KDDX-FM and KZZI-FM, when there is a high band VHF channel available for KHSD DTV assignment.

We are requesting DTV channel 12 be assigned to KHSD. The closest co-channel 12 is KRNE, Merriman, Nebraska, at a distance of 251.3 Km, followed by KSGW, Sheridan, Wyoming, at a distance of 263 Km. It appears with the point to point studies on both of these stations, there is sufficient terrain shielding and distance to prevent any interference problems, since the OET Bulletin No. 69 which would provide the necessary methodology to study the interference threshold is not available to us. There are two adjacent channel 13 stations to consider. The closest adjacent channel 13 is NTSC 13, KPSD-TV, Eagle Butte, South Dakota, at a distance of 148.6 Km, the other is proposed DTV 13, Miles City, Montana, at 280.2 Km. Both well exceed the minimum separation of 80 Km for adjacent channels.

Reassigning KHSD to DTV channel 12 would allow diplexing into the existing channel 11 antenna, with no burden placed on our tenants. This reassignment would be in the best interest of all parties involved.

We, therefore, ask the Federal Communications Commission to consider our proposal for reassigning KHSD to DTV channel 12.

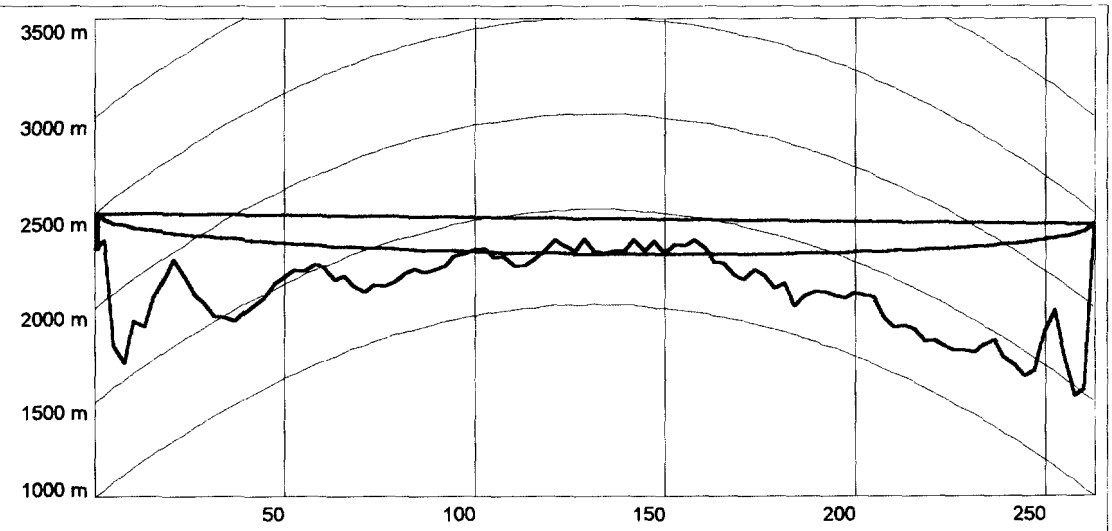


KHSD TV	Dist (Km): 251.3	KRNE TV
Lat: 44-19-36 N	Bearing: 136.81	Lat: 42-40-38 N
Lon: 103-50-12 W	# pnts: 100	Lon: 101-42-35 W
Site AMSL (m): 2310.0	K: 1.333	Site AMSL (m): 1392.0
Tower AGL (m): 184.4	Fres. Clr: 0.600	Tower AGL (m): 313.6
	Freq (MHz): 204.25	

Free Space Loss = 126.7 dB

Plane Earth Loss = 165.8 dB

Excess Loss = 0.0 dB

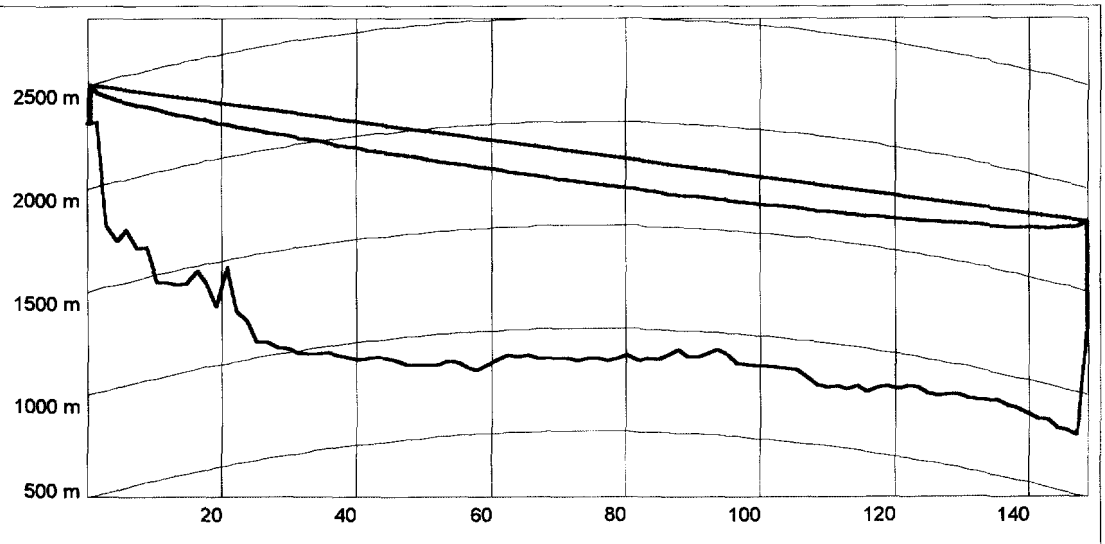


KHSD TV	Dist (Km): 263.0	KSGW TV
Lat: 44-19-36 N	Bearing: 277.17	Lat: 44-37-20 N
Lon: 103-50-12 W	# pnts: 100	Lon: 107-06-57 W
Site AMSL (m): 2310.0	K: 1.333	Site AMSL (m): 2384.8
Tower AGL (m): 184.4	Fres. Clr: 0.600	Tower AGL (m): 43.9
	Freq (MHz): 204.25	

Free Space Loss = 127.1 dB

Plane Earth Loss = 112.9 dB

Excess Loss = 0.0 dB

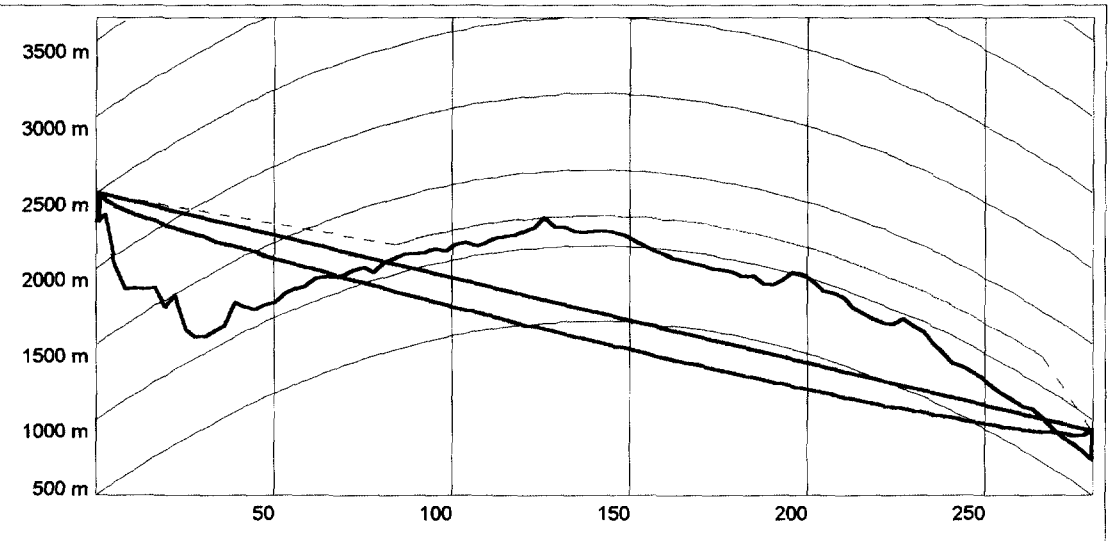


KHSD TV	Dist (Km): 148.63	KPSD TV
Lat: 44-19-36 N	Bearing: 57.06	Lat: 45-03-14 N
Lon: 103-50-12 W	# pnts: 100	Lon: 102-15-47 W
Site AMSL (m): 2310.0	K: 1.333	Site AMSL (m): 1314.6
Tower AGL (m): 184.4	Fres. Clr: 0.600	Tower AGL (m): 516.9
	Freq (MHz): 211.25	

Free Space Loss = 122.4 dB

Plane Earth Loss = 84.4 dB

Excess Loss = 0.0 dB



KHSD TV	Dist (Km): 280.2	KYUS (DTV
Lat: 44-19-36 N	Bearing: 325.73	Lat: 46-24-38 N
Lon: 103-50-12 W	# pnts: 100	Lon: 105-51-03 W
Site AMSL (m): 2310.0	K: 1.333	Site AMSL (m): 728
Tower AGL (m): 184.4	Fres. Clr: 0.600	Tower AGL (m): 189.9
	Freq (MHz): 207.0	

Free Space Loss = 127.7 dB

Plane Earth Loss = 168.6 dB

Excess Loss = 12.9 dB